UNITED NATIONS

World Chronicle

PROGRAMME: No. 569, recorded 20 October 1994

GUEST: **ASSAD KOTAITE**
President of the Council
International Civil Aviation Organization

JOURNALISTS: Anthony Goodman, Reuters
Bhaskar Menon, *The Times of India*

MODERATOR: Michael Littlejohns

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Assad KOTAITE, President of the Council of the International Civil Aviation Organization (ICAO), reviews the work of ICAO and the evolution of air traffic over the last 50 years. Among ICAO's chief activities are the establishment of international standards and recommended practices and procedures covering the technical fields of aviation. The safety of human beings is one of the major concerns addressed by ICAO's programme of technical cooperation and training. The human factor is identified as the greatest single cause of aviation accidents. The impact of air traffic on the environment is one of the challenges facing the world today.

WORLD CHRONICLE is produced by the Media Division, Department of Public Information, United Nations, New York, NY 10017, U.S.A.

Duration:	28:00"
Executive Producer:	Kamil Taha
Director:	Livingston Hinckley
Production Assistant:	Ellen McGuffie

ANNOUNCER: From United Nations Headquarters in New York, this is **World Chronicle**, an unedited interview programme about major global issues. Here now to introduce our guest is the host of today's **World Chronicle**.

LITTLEJOHNS: I'm Michael Littlejohns, and this is **World Chronicle**.

There's no doubt that the development of the airplane is one of the most spectacular events of the 20th century. Today, the world is enveloped by a network of air routes, and the air has become a highway for global commerce. But this major achievement has brought with it international problems. To ensure the safe and orderly growth of international civil aviation, the world community established the International Civil Aviation Organization, or ICAO, in 1944.

Our guest today is in a unique position to reflect on the work of this vital United Nations organ. He is Assad Kotaite, President of the Council of ICAO. Joining me to talk with Mr. Kotaite are Anthony Goodman of Reuters and Bhaskar Menon of *The Times of India*. Mr. Kotaite, welcome to World Chronicle.

Mr. President, the ICAO predated the United Nations. How did that happen?

KOTAITE: Indeed, ICAO was established in 1944 and the United Nations was established one year later. It's interesting to see that ICAO was established during the war for peace, and the treaty of ICAO, which is known as the Chicago Convention, was drafted, as a matter of fact, in 1944. Then you can appreciate --

LITTLEJOHNS: So the organization was actually established in Chicago?

KOTAITE: In Chicago. And this is why -- this year, this is the fiftieth anniversary, and we are going to celebrate the fifthieth anniversary in Chicago, the starting day of the conference, and the signing of the Convention will be celebrated in Montreal, the headquarters of ICAO.

LITTLEJOHNS: How many members were there originally?

KOTAITE: Originally -- well, the initiative came from the United States of America. And the idea started in 1943, when the three leaders --

LITTLEJOHNS: When the war was still raging.

KOTAITE: Absolutely. When the three leaders met in Teheran at that time -- President Roosevelt, the Prime Minister of the United Kingdom, Winston Churchill, and Stalin -- there was a paper presented by President Roosevelt saying that we must think now of peace. We are producing thousands of aircraft for war, we are establishing air bases -- what will we do now, with all those things? We must see how we can convert all these things to peaceful purposes. And one year later, Washington, the United States of America, took the initiative to invite 53 states, the Allies, and 52 out of the 53 attended

the meeting. Missing at that time was the Soviet Union itself, they did not attend the meeting.

LITTLEJOHNS: Why was that?

KOTAITE: Well, it seems that the Soviet delegation arrived in Winnipeg, Canada, and they were informed about who was going to attend the meeting, including probably one of the states with whom they were not on good terms, and they preferred not to attend the meeting.

MENON: Before this happened, was there any kind of regulation of civil aviation before the war?

KOTAITE: Yes. Of course, we have to go back to 1919, after the First World War. It is very interesting that the development of civil aviation always comes after the war. After the war. And we had the Paris treaties, which included the Versailles Treaty, which included the League of Nations. And they established a commission, the International Air Navigation Commission, known as CINA, its French name. And the headquarters of this Commission were in Paris. And they were to look to safety, to regulate flight, et cetera. But aviation was rather limited. The work was more regional than international.

MENON: So there was no organization set up to look at civil aviation?

KOTAITE: At the level of ICAO as it is, no. At the level of ICAO, no.

GOODMAN: I read, Dr. Kotaite, that at any one time there's as many as 10,000 planes in the air, which seems an enormous number, of course, unless you happen to be stacked up at an airport yourself. But are we reaching the maximum number, given the present air transport control technology? Or is there still plenty of leeway?

KOTAITE: As a matter of fact, we have reached the maximum number, also taking into account the growth of traffic according to our forecasts, which, for the coming 10 years, will increase every year by 5 per cent. This last year the commercial aircraft in their scheduled services -- I am not counting the charters or the private aircraft -- they carried 1 billion 200 million passengers. We think by the end of the century they will carry 1 billion 800 million passengers. This means 30 per cent of the global population of the earth. And this matter has been studied by ICAO, because the existing system has reached some kind of saturation. This is why we have congestion now, and this is why we have many problems in the sky as well as on the ground. Then we investigated whether we could replace the present system to provide air navigation services, air traffic control, as you have mentioned, by something else. And advanced technology proved that we could use space technology, satellites, for instance, instead of ground stations. And we now have this programme. We have finished all the studies

technically; we are now developing a legal framework, because this new technology is a seamless one. When you have something on the ground, the state itself with its sovereignty, controls it; when you have satellites about 20,000 kilometres in upper space, in outer space, no one can control it from the sovereignty point of view. So ICAO is trying to establish --

MENON: But what kind of technology are we talking about? When you say space technology, what do you actually mean?

KOTAITE: By that I mean what we call, in aviation terminology, CNSATM, communications navigation surveillance and air traffic management by satellite. To give you an example, now aircraft can not fly without contact with the ground. The pilot is blind without the ground. It's up to the ground station, to the air traffic controller, to communicate all the data for the flight -- separation of aircraft, information regarding the weather, speed, altitude, et cetera, et cetera. All these things will be done later by satellites.

LITTLEJOHNS: But how much later? I mean, is this the technology which is going to be brought into operation within a couple of years? Five years? Or is it way down the road?

KOTAITE: We have two kinds of satellites. Satellites for communications exist now -- communication by television, by telephone, et cetera. The crucial thing is how to navigate by satellite. This technology exists in two countries in the world, the United States and Russia. It was developed for military purposes.

LITTLEJOHNS: For space shots.

KOTAITE: For space, for military purposes. And ICAO is in contact about this with the United States and with Russia. They are the providers of services. And willingly, of course. They said "We are willing to offer our system for civil aviation purposes." And now we are in the process of arranging this system to make it available on a global basis by 2010. It takes time. It takes time to replace the existing system; it takes time for investment, for training. It is not easy, it should be implemented gradually. But the advantage of the system, when the system is implemented globally -- and this is according to our studies -- is that the economy, the savings that we can realize is about $5 billion, in using the satellite system instead of the ground system.

LITTLEJOHNS: $5 billion a year.

KOTAITE: $5 billion a year. And the beneficiary, of course, will be the airlines, plus the administration, the government, but mostly the airlines.

LITTLEJOHNS: Probably not the passengers! If experience is any guide.

KOTAITE: I would say yes, ultimately.

LITTLEJOHNS: Yes? Really?

KOTAITE: Oh yes. Because what are the advantages of the system? That the airlines, the aircraft, could have better use of air space. We could have much more direct routes. All the routes, or the sky highways, are established by ICAO, because aircraft could not fly without what we call air routes. All air routes are established by ICAO. And actually, now not all air routes are direct; there are some restrictions. With the new system, most routes will be direct, and the separation of the aircraft will be better. Then we will reduce congestion to a minimum, for instance, as we are now witnessing congestion.

MENON: But this is a point which I wanted to ask you about. When you said that we're reaching a saturation point, you mean with the current systems of control?

KOTAITE: Yes.

MENON: So this new system would allow a much greater expansion?

KOTAITE: Of course, much more flexible. Much more flexible.

GOODMAN: And are they large -- is this new system, would it be largely automated, so you'd need fewer staff? Or would you still need a human element to a large extent, as you do now?

KOTAITE: Well, I will put it this way: The new system will be a beautiful marriage between the satellite and the computer.

LITTLEJOHNS: Mr. President, I guess there's probably no element in aviation that's more important to the individual than safety. What is ICAO doing to enforce rigid safety measures?

KOTAITE: The main objective of ICAO is the safety of flights. ICAO is the only forum in the world which has the right to establish international standards. And the international standards established by ICAO cover all facets of safety. It is up to the state to implement them, but the states do commit themselves with regard to the standards. Then when the standards are established regarding air worthiness of aircraft, whether the aircraft is worthy to fly or not, regarding air traffic control, communications, metallurgy, technical operations of the aircraft -- all these things -- well, the states should implement them. States commit themselves. If they are not implementing them, they should find differences with ICAO. Then we will know exactly which states are implementing them, to what degree, and those that are not implementing them. Then we will contact the states through our regional offices in the world; we will send missions. We will have a dialogue with them -- why? Is this for technical reasons, for financial reasons, for what kind of reasons? And this is how we could remedy the situation.

And most of the time, states are not implementing part of our standards for financial reasons. And here ICAO will intervene with its technical assistance programme, its technical cooperation programme. We will send experts, we will develop projects with the state concerned depending on what aspect, what disciplines, and we will help the states to be able to implement the ICAO standards.

I would like to mention something which is unique. In 50 years, the existence of ICAO from 1944 until now, with all the standards that ICAO has established -- and I have been with ICAO -- I'm an old-timer -- longer than four decades -- I don't recall that one standard has been disapproved by the states. We have a very democratic process, because when we establish standards we have a global meeting. Then we take the recommendations, we study them, we send them back to the states to get their comments, and in the light of their comments we finalize them through our normal procedure, through a technical body, the Air Navigation Commission, and finally the Council of ICAO, which adopts it. And with all these kinds of standards, I don't recall, and it is not recorded in our records, that one standard has been disapproved. Many are not implemented, but for other reasons, not for technical reasons.

LITTLEJOHNS: This is World Chronicle. Our guest is Assad Kotaite, President of the Council of the International Civil Aviation Organization. Anthony Goodman.

GOODMAN: Dr. Kotaite, if the skies are getting crowded, one way you say is to improve the navigation and control system. Another way would be having people either spending less time in the air, i.e., supersonic transport, the trips take much less time, or having bigger airplanes so that fewer aircraft are needed for a given number. Are either of those things in the works -- larger aircraft with bigger capacity, and/or speedier aircraft? At the moment we seem stuck on the Concorde as the only supersonic plane. Are there other plans for further development of --

LITTLEJOHNS: Which actually has a very small capacity also.

GOODMAN: Yes.

KOTAITE: Yes, you are right, the only supersonic we have is the Concorde, and, as you know, its operations are very limited; it's only for the North Atlantic. They started with other parts of the world, but for financial and rentability reasons, of course, they shrank their operations: they are only in the North Atlantic, between Paris and the United States and London and the United States. For the future, I think 10 years from now, by 2005, it is very likely that we will have a plane with the same speed, subsonic speed, but with larger capacity. We are thinking about --

LITTLEJOHNS: Subsonic did you say, or supersonic?

KOTAITE: No, subsonic.

LITTLEJOHNS: Subsonic.

KOTAITE: The jet. Yes. Subsonic, exactly --

LITTLEJOHNS: Why not supersonic?

KOTAITE: Well, I will come to that. With a larger capacity with subsonic speed, between 600 and 800 passengers. This is the --

GOODMAN: And now the limit is what? 500, 400 and something?

KOTAITE: The maximum is 500. This is the 747-400, which can go -- according to the configuration of the plane, it can go up to 500, but usually they operate between 400 and 450. But now the larger aircraft, yes, I would say 10 years from now the possibility is there, but with the same subsonic speed. They are considering developing a hypersonic speed, which goes twice or more than twice the speed of the supersonic Concorde now, about 2.4 Mach.

GOODMAN: What does the Concorde do? Is it not supersonic? I thought --

KOTAITE: It's supersonic.

GOODMAN: It is?

KOTAITE: But they will go more than that speed. It's still supersonic, we call it hypersonic. Hypersonic.

LITTLEJOHNS: Which is what, twice as fast as --?

KOTAITE: It's twice as fast. More than twice as fast.

LITTLEJOHNS: More than twice as fast.

KOTAITE: But this aircraft could be --

LITTLEJOHNS: So you could come from London to New York in about two hours, in that case.

KOTAITE: Yes, yes, but I think such aircraft should be between New York and Tokyo, for instance; between San Francisco or Los Angeles and New Zealand and Australia. The North Atlantic becomes very small!

LITTLEJOHNS: Except that for economic reasons they probably wouldn't have enough passengers, would they? I mean, Tokyo perhaps, but not New Zealand. With great respect to New Zealand.

KOTAITE: Well, we think the traffic is growing, and as for the passengers, I think they will have enough passengers for such aircraft. But the technology is there, it's not in -- I mean the problem is not to develop it, the problem is to have it for at least 200 to 300 passengers. Because if they limit their capacity like the Concorde -- and we are talking about economy and commercial things -- of course, the aircraft will not be rentable. This is one thing. The other thing that they should study very carefully and

take the necessary measures, manufacturers and later ICAO, by the standards we develop, is the environment. Because those aircraft, they have to fly in upper space, and they have engine emissions. To what extent can engine emissions affect upper space, from the pollution point of view?

LITTLEJOHNS: By "upper space" you mean what, 50,000 feet? 100,000 feet?

KOTAITE: Now the Concorde is flying at 50,000 feet; possibly it will be more, but 50,000 feet, yes.

MENON: But this is a problem that you haven't assessed as yet. I mean, I see from looking at ICAO literature that the environmental effect of current air traffic is something which you haven't come to grips with yet. There have been complaints that engine emissions have not only polluted the environments around airports, but have had a larger impact on the atmosphere. And there is a study group which ICAO has set up, but they haven't come to any definite conclusions, have they?

KOTAITE: Well, first I would like to say that if you compare civil aviation as a pollution factor with other pollution factors, civil aviation is much less than any other pollution factor which comes from industry.

MENON: But how do you know if you don't have any measurements?

KOTAITE: We have measurements, of course; we have measurements. ICAO is taking a lot of consideration with regard to the environment. The environmental considerations are threefold: the noise of the aircraft, engine emissions in upper space, and land use in the vicinity of airports. For the last 25 years, ICAO has been one of the first agencies of the United Nations to have a programme. As a matter of fact, we attended the Stockholm Conference in 1971, and from that conference, of course, the environment started to be in the mind of all governments, in the mind of the public.

LITTLEJOHNS: The first Environment Conference in Stockholm.

KOTAITE: And since that time we have established standards, international standards, regarding the noise. And now, for instance, the aircraft, what we call chapter 2, stage 2 -- not the new generation, the older generation, the subsonic, jets -- well, they are allowed to fly until 2002. And after that, they could not fly to airports where they have noise restrictions. And we have a very highly scientific Annex 16,[1] and now manufacturing, the manufacturers of the engines take our standards, work with our standards from the noise point of view. And regarding pollution, we have, as you mentioned, a group of experts in research and science, and they are working on this

---

[1] Annex 16 of the Chicago Convention on Civil Aviation pertains to environmental protection and addresses noise and engine emissions.

matter. Recently they were able to reduce about 20 per cent of the Nox, the nitrogen oxides. And we continue our work.

LITTLEJOHNS: Of what? What was that?

KOTAITE: Of the Nox. This is the --

LITTLEJOHNS: Nox? What's that?

KOTAITE: Nitrogen oxides that come from engine emissions.

LITTLEJOHNS: Toxic?

KOTAITE: Toxic, yes.

LITTLEJOHNS: I see, I see.

KOTAITE: From engine emissions in upper space.

MENON: Could I ask you, one other aspect of this which is a fly in my soup as a traveller, someone who's had to travel quite a bit, there is something called a frequent flyer syndrome: When an individual travels a lot by air, there is a definite effect on his health. This is -- people talk about it. Frequent flyers clubs have raised the issue. But there has been no study of it, there has been no real attempt to pin down what exactly this might be and what long term implications for health this might have. Is this something which concerns you?

KOTAITE: I don't think that anyone.... Maybe the pilot, but even I compete with the pilot, to fly as I do. I haven't had this one.

[LAUGHTER]

GOODMAN: Sort of like a big brother to jet lag.

MENON: Yes, exactly, it's a kind of long-term jet lag.

GOODMAN: Have you ever had your bags lost? Have you ever had your bags lost or been bumped off a flight?

KOTAITE: Fortunately not.

[LAUGHTER]

Sometimes I receive them 24 hours later, but I don't recall that I've lost anything.

LITTLEJOHNS: In connection with that, Mr. Kotaite, does ICAO, apart from such matters as control, ground control, get involved at all in services on the ground? I mean, you talk about these 800 passenger aircraft, imagine the problems that are going to exist getting your bags. 800 people arrive on one plane, another 800 on another, and so on and so forth. Nobody's ever going to be able to collect their bags. How are you going to deal with a situation like that?

KOTAITE: Well, that's a good question. Of course ICAO is involved in facilitating the passengers through the airports. And we have special regulations -- what do we call it? -- Annex 9, facilitation. It is addressed to customs, to immigrations, to the

help and management of airports regarding how they should organize traffic and the kind of formalities that usually the state should use. This is exactly to help the flow of traffic through the airport.

LITTLEJOHNS: Mr. Goodman?

GOODMAN: There's a big conference coming up shortly in Chicago in which ICAO is involved. Could you very briefly tell us what the aims of that conference are?

KOTAITE: In Chicago we are going to celebrate the fiftieth anniversary.

GOODMAN: I beg your pardon, I meant Montreal.

KOTAITE: Yes. And then after the celebration of the fiftieth anniversary in Chicago, in Montreal after that we will have a World-wide Air Transport Conference. And after that, we will celebrate the signing of the Convention. The World-wide Air Transport Conference is to look to the present and future regulations of air transport, not from the technical point of view but from the policy point of view, from the economic point of view. And mainly the Conference will focus on the future. For the last 50 years, all the air transport in the world -- the movement of passengers, the movement of aircraft, frequencies, the city services -- all these things are done in accordance with a bilateral agreement. And the bilateral agreement means that the governments themselves will do two things -- micromanagement and macromanagement. Everything should go through the government.

With the globalization that we now have in the world, well, the market is open. And we now have forces of the market regulating air services in such a way that traffic has become much more liberal. And taking this concept into account, ICAO felt that it is necessary to have a world meeting to discuss the matter, because when you say "the market", not all airlines, especially airlines of developing countries, have the same power in the market. And sometimes the forces of the market could eliminate a number of airlines. Our concept for air transport is to maintain this extraordinary global network which exists now, which is unique in the world. We should try not to marginalize any airlines; all airlines should be part of this network. And this is why this conference is going to consider all these things, to see what would be the best formula to maintain this network so that all airlines could have their share.

LITTLEJOHNS: Mr. Kotaite, you've identified a number of problems. Are you confident that they're going to be resolved in the next few years? In the few seconds we have left.

KOTAITE: I would say yes. I would say yes. Fifty years ago, they were dreams. But things become reality. We have to have a good dream, a nice dream. And I am

sure that, with the political will and the cooperatic of states, we will reach our objectives.

LITTLEJOHNS: On that happy note, Mr. Kotaite, that's all the time we have. Thank you for being with us on this edition of World Chronicle. Our guest has been Assad Kotaite, President of the Council of the International Civil Aviation Organization. He was interviewed by Anthony Goodman of Reuters and Bhaskar Menon of *The Times of India*. I'm Michael Littlejohns. Thank you for joining us. We invite you to be with us for the next edition of World Chronicle.

* * * * *

Transcripts of the programme may be obtained free of charge by sending a stamped, self-addressed envelope to: **World Chronicle**, United Nations, Room S-827, New York, New York, 10017, USA.

World Chronicle is broadcast worldwide and features guests whose work is concerned with major global issues. This programme is a public affairs presentation of this station from United Nations Radio and Television.

Additional information material about the United Nations can be obtained by writing to the Public Inquiries Unit, United Nations, Room GA-57, New York, New York, 10017, USA, or the UN Information Centre in your country.